The Official Newsletter of the Kansas City DX Club



ABOX-EDITOR

KCDXC Website: http://www.kcdxclub.com/

April 2023

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NEXT KCDXC MEETING: April 24 -The next KCDXC meeting will be a LIVE meeting at the JOCO Library, Central Conference Room 4, 9875 W. 87th St., Overland Park KS, 66212.Start: 6:30pm. Zoom available also. Guest speaker will be Bernie, W3UR, of *Daily DX* fame!

NEW MONTHLY FEATURE: SHACK PICTURES! This month, KI0I, Mark, of Garden City, Mo, sends over this pic of his shack via QRZ.com. Very nice shack, Mark!



Send in your shack pics to the Editor: ab0x@kc.rr.com.

KCDXC DXCC HONOR ROLL

		<u> </u>	DAC	DACC	HOIN	OK K	<u> </u>	
Call	Mixed	CW	Phone	DIGI	IOTA	160	6 M	DX Challenge
AB0X	357	353	353	236		227	48	2382
W0GJ	354	344	354	292		236	20	2799
NØRB	353	347	351				23	2269
КЗРА	352	350	346	323		191	36	2746
N0CWR	350	350	350	326	985	207	93	2933
NX0I	350	349	347	271		211	6	2522
K0CA	350	349	350	331	318	112	36	2641
K0HQW	349	333	347			33		1352
AC0A	348	321	348	24	882		15	2288
K0VXU	348	335	331	265	439	143	2	2295
KS0DX	347	324	337	225	360	107		2516
K4SV	346	340	344	337		301	87	2852
K0GY	344	342	344	292			5	2316
KB0X	336							
KE5BR	335	177	297	79				742
K0AP	334	331	325	295		47	8	2353
WØQQ	334	248	332	234	151	115	38	1937
KOTHN	334	322	288	193	243	1		1929
WA0WOF	333							
K4SX	331	280	320	187		52	82	1773
W0MB	329	255	326	285		45		1849
KØXM	326	292	275	225		113	24	1858
AA0MZ	312	290	292	220	532	44	20	1296
AC0C	310	306	267	243	160	128	3	1852
K0IZ	300		300					
AD0K	265	247	88	200	209	36	6	940
NS0D	263	219	142	130		3	2	
AI60	258	230	200	171		20	10	992
WOXE	248	216	193	14				833
NØEG	243	203	169	120		20	11	783
W0DR	229	30	174	70		10	7	622
N9GB	203							
NØRC	168	37	50	127	68	3	3	674
W0ZAP	154	28	76		21		5	565
W0HL	101	23	52	83		5	7	257
WD0SRI	63	17	56			1	1	138
			-					

Red indicates member is at the top of the DXCC Honor Roll in that respective class. Totals are with deletions.NOTE: When changes of DXCC totals are sent in to me, they are immediately updated in the next month here in the newsletter. Send to abox@kc.rr.com . Please only one update a month.

The Presidents Corner

April 2023 Chuck KØXM

Greetings!!!

Well, let's start with some GOOD news, shall we? It looks like due to Rick WOZAP, diligent hard work with Chuck NO5W- the CW Pileup Contest for Dayton is good to go!!! We had a test of a new package on the 4th, and it ran with 1 minor glitch (which ahs been corrected since the test), but the main issue of crashing is gone. Again, MANY thanks to Russ, KOVXU, Bill



KOVBU, and Rick WOZAP for the work and collaboration to make this happen.

This month we have Bernie W3UR of the Daily DX fame speaking to us on all matters DX.

We have been very lucky in that there have been a few (more than the last couple of years) DXPeditions and active sunspots to get those ATNO's, and Band country slot fills. If you are just starting out, by all means reach out to one of us with any questions. There is a massive wealth of information and resources stored in the brain of those of us who have played many years in this game. One of my mottos when I was instructing clients in a previous life in matters concerning High Voltage, and Power substation items is "There are NO dumb questions". And believe it or not, ALL of us have had the same questions at one point in our lives. Last I heard the "I knew everything I needed to know from birth" article in the National Enquirer has not been published so ask away.

Starting next month, I will be writing an article on various (one each month) general logging and contesting programs. I will try and answer any questions you may have, by duplicating issues and letting you know a possible fix or work around. Plus I will try and cover the setup and how to get started with these programs. Once I complied the list, I will post which program will be talked about month by month

That should be all this month- no ramblings from me...life has been hectic...

The meeting will be at Conference Room 4 (12 person capacity) at the library and also Zoom.

Here is the address of the library. If we can make it through Dayton alive, I will start a HARD push for another venue where we can book months in advance to make life easier...

Johnson County Central Resource Library 9875 W 87th St Overland Park, KS 66212 73 es Good DX Chuck KØXM (ex- NØBIW) March 27, 2023

Kansas City DX Club Meeting Minutes

The March 2023 meeting of the Kansas City DX Club was called to order by President Chuck Kraly, KOXM at 6:30pm CDT. The meeting was conducted in the Johnson County Library Main Branch Carmack Community Room and on Zoom.

Agenda

- 1. Introductions
- 2. Upcoming DXpeditions and Contests
- 3. Dues
- 4. DXPedition donations
- 5. CW Pileup Contest run through status (under introductions)
- 6. Possible upcoming presentations
- 7. Comments and next meeting

Introductions

We each introduced ourselves, first those on Zoom, then those in person. Many comments were related to working (or not) CYOS, Sable Island.

- Dennis, WOHL, reports that he has DXCC confirmed. Congratulations, Dennis.
- Jim, ACOKN, doing antenna work
- Rick, WOZAP working with Bill, KOVBU, on <u>CW pileup contest</u>. There is a new version of software and another setup attempt will be announced shortly.
- Dragan, KOAP, thought solar storms had a big impact on the recent contest. Six meters is hot to South America.
- Dave, W7FB, has moved and has now found his desk and plans to work in the Missouri QSO Party this weekend.

Contests

Missouri QSO Party, April 1 and 2. ARRL Rookie Roundup North American SSB

As usual, see the WA7BNM online calendar https://www.contestcalendar.com/

DXpeditions

Chuck, KOXM again provided information from the DX World website for upcoming DXpeditions. Looks like several good ones are coming up this month again.

This information will be provided on groups.io. Chuck also uses the NG3K Announced DX Operations website for information. This information is also available



on the https://kcdxclub.org/dxpeditions website.

DXPedition Donations

Rick, NORB, reported that his club in Texas requires any requests for donations over \$1,000 be approved by vote of the membership. Under that can be approved by the committee.

Joe, KA3NAM, mentioned that the Club is a 501 (c)(3) organization and therefore, contributions to it from members and to DXpeditions need to be documented carefully. Adding the club logo to the form to be filled out by the requesting organization was suggested.

This brought about a discussion as to the requirement to have an agent and who qualifies as an agent. There was some dispute as to this so the subject was tabled and interested parties can discuss it privately.

Dues

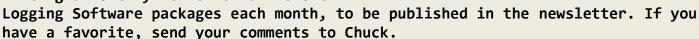
Check the Roster on the club website to see if you are current on your 2023 dues. https://kcdxclub.org/roster

<u>Upcoming Meeting Presentations</u>
Power Utilities Safety has been suggested as a presentation subject.

The presenter for next month will be Bernie McLenny. W3UR, publisher of <u>The Daily DX</u> newsletter.

Discussion

Chuck, KOXM, stated that he would be writing a monthly review of different



The next meeting will be April 24, 2023, the last Monday of April, on Zoom and at the Johnson County Main Library.

The meeting was adjourned at 7:42pm.

Charlie Hett, KOTHN, KCDX Club Secretary.



SEND IN YOUR 2023 CLUB DUES TO WOZAP! USE THE PAYPAL LINK ON THE KCDXC WEB

PAGE: https://kcdxclub.org/

HI FROM THE SKY

BY KY00

Hi, again, contesterrs and Dxers. This month we'll discuss amateur satellites.

First, a review, some of which most of us know.

We all know that satellites vary in size, shape and complexity from the low earth orbit (LEO) to those in geostationary orbit (GEO). Some are FM and some transponders. We'll cover each.

Many of the new "cubesats" are small and have been placed in orbit by the new and up-and-coming commercial space transportation companies. As these upstarts get going, launch costs will hopefully plummet, bringing our costs down. This is im-



portant because if we hams are going to get something up with multiple options and capabilities into either GEO or a mulnia orbit where we can really use it for practical time lengths, this must be so.

Amateur satellites are called OSCAR, short for orbiting satellite carrying amateur radio. You'll hear this a lot from satellite enthusiasts.

The FM satellites are in LEO, which means they are used only for about eight minutes per pass. A pass is no more than the point where the satellite is usable. These satellites, or birds as they're affectionately known, are also affected by Doppler sift, with the signal being blue-shifted when the bird approaches, and red-shifted, when it leaves. This Doppler shift is less pronounced with birds in higher orbits. This is a raising in frequency upon approach and a dropping after closest approach. The frequency is normal only at the closest point between the satellite and the operator. It's best to move the transmitter or uplink frequency to allow the receiving station to stay tuned to the same downlink frequency. This is especially true on SSB and CW.

There are a couple of types of operation. FM satellites work like the standard FM repeaters. This makes the system more channelized and narrower in bandwidth. The other satellite type is called a translator. Some are linear translators and some are inverted from the uplink transmission. If you transmit high the output is low and visa-versa.

There are not only modulation modes, but uplink and downlink modes. These modes are named for the bands they cover—mode UV for UHF uplink, and VHF downlink, stuff like that.

Orbits vary in shape and determine the time of any given pass. We are all familiar with geostationary birds from our use of the twelve gig dishes at home. The satellite revolves at the same time the earth turns on its north to south axis, keeping the bird over the same point with a minimum of fuel expenditure. There is one amateur satellite using this orbit, and the Europeans and north Africans use it.

A mulnia orbit elliptical with its high point above some point in either hemisphere and its low point somewhere above the equator. These points will vary because both the earth and the satellite are in motion relative to each other. Twelve-hour passes are possible when the satellite comes into view. The last satellite operated in a Mulnia orbit to good effect was OSCAR TEN in UV and UU modes. OSCAR THIRTEEN promised a one hundred-watt inverted translator on UV mode but was lost when the ARIAN launch vehicle exploded at liftoff. I miss OSCAR TEN, because small antennas were practical, and long, stable contacts were fine in the continental US and into Europe and the Pacific depending on where the satellite was in the sky.

What is nice about satellite operation is the modest station equipment one can acquire and use. Although many of the techniques used to run EME are best for satellite operation, the antennas and power requirements are much lower in size and quantity. Portable and rover operation become a snap, because of this. The short feed lines almost put the preamp and transmit power amp at the antenna feed point, and this cuts down on losses here. Portable locations usually cut down on noise received and the satellite downlink is heard clearly. Circular polarized antennas of fair size and performance can go along for the ride and contribute to station performance.

If you want to run EME, run satellite operation first, then scale up as you gain experience. You'll find these kinds of operation to be similar, and many skills you learn here will apply when operating an EME station.

Tracking has become much easier nowadays with small computer control software and hardware. Laptops can be dedicated trackers that can keep antennas aligned with the bird even while roving or running portable. Some companies make antennas small enough to connect to a pair of handhelds running FM, and providing high-quality QRP operation on modes UV and VU.

As in any ham radio operation, the Craigism doth apply—antenna, feed line, receiver. I call this the FAR principle. The better these are the further you work. At the high point of a Mulnia pass, the bird can be twice as high as a geostationary bird, and the inverse square law comes into play. Receive preamps, small transmit power amplifiers, and rigs with all the HF filtering and other capabilities can make your satellite operation fun.

Polarization is also a consideration here. Many satellites are spin-stabilized, so depending on their antennas, what is called spin modulation is a strong possibility if they are the least bit directional. This lessons as the satellite in a high Mulnia orbit approaches apogee, the high point in any given orbit. It increases at perigee, the orbital low point. Fore this reason, circular polarization is recommended. If you can switch between left-hand and right-hand polarization, things become better. The downlink may have a different polarization than the uplink. So make each antenna's polarization switching independent of the other. Spin modulation, or spin mod, as it's called occurs when the directional antennas on a satellite move toward, then away from the ground station at the satellite's spin rate. This spin is used to keep the bird stable while on orbit. Circular polarized antennas minimize the effects of spin mod.

It's often interesting to listen to the beacons on the birds. You can hear various scatter modes, Doppler shift as the bird moves around, and can decode telemetry, depending on what modulation mode the beacon is operating in. Some of the birds ran RTTY, CW, FM voice, and multi-cdhannel PSK (phase shift keying). If you can decode what's sent, lots of information about the bird's general health and other values are sent to the ground.

But, where's the durn satellite, anyway? Now, there are software programs which crunch all those numbers with letters for names and tell you where the bird you're going to work is. Some software can actually point the antennas at the satellite's expected position on the horizon, so all you do is work the thing at what is called "acquisition".

Some newer radios can also be controlled via CAT (computer-aided tuning) signals from the tracking software. These signals control how the radio works with Doppler shift, whether it is operating through a linear or inverted translating transponder, or what polarization is needed. They also can work with logging software to give access to the operator's awards interests.

Hopefully, in the future, we'll get either a bird in either GEO or in a high Mulnia orbit to make satellite operation useful. Until then, satellite work will be a kind of hit and miss affair. -KY00

DX NEWS & VIEWS

BY ABOX

ARLD015 DX news

This week's bulletin was made possible with information provided by The Daily DX, 425 DX News, DXNL, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM web sites. Thanks to all.

TIMOR-LESTE, 4W. A group of operators are QRV as 4W1A until April 22. Activity is on 40 to 6 meters using CW, SSB, RTTY, and FT8. QSL via DJ4MX.

UGANDA, 5X. Eddy, OE3SEU is QRV as 5XA1J. Activity is on the HF bands and on Satellite QO-100. QSL via LoTW.

MALDIVES, 8Q. Mike, OE3MZC, Laryssa, OE3YLR, Barbara, OE3YCB and Florian, OE3FTA are QRV as 8Q7BZ, 8Q7FZ, 8Q7LZ, and 8Q7MZ, respectively, from Rakeedhoo Island, IOTA AS-013, until April 29. Activity is holiday style on the HF bands and on Satellite QO-100. QSL to home calls.

CROATIA, 9A. Special event callsign 9A23WARD is QRV until April 30 to bring attention to World Amateur Radio Day. QSL via 9A3JB.

TRINIDAD AND TOBAGO, 9Y. Special event callsign 9Y4WARD is QRV from Trinidad, IOTA SA-011, until April 18 to commemorate World Amateur Radio Day. QSL via LoTW.

BAHRAIN, A9. Special event station A91WARD is QRV until April 18 to bring attention to World Amateur Radio Day. QSL via EC6DX.

SOUTH COOK ISLAND, E5. Janusz, SP9FIH and Leszek, SP6CIK are QRV as E51WEG and E51CIK, respectively, from Rarotonga, IOTA OC-013, until April 28. Activity is on 40 to 10 meters using CW, SSB, RTTY, and FT8. QSL to home calls.

SAUDI ARABIA, HZ. Special event station HZ1WARD is QRV until April 18 to commemorate World Amateur Radio Day. QSL via HZ1SAR.

SURINAME, PZ. Look for Rico, PZ5JW to be QRV in the CQ Manchester Mineira CW DX contest. Activity will be on 80 to 10 meters. QSL via EA5GL.

PALAU, T8. Ichiro, JH7IPR is QRV as T88UW from Koror, IOTA OC-009, until April 20. Activity is on the HF bands with a focus on 12, 10, and 6 meters, using CW and FT8. This includes being an entry in the CQ Manchester Mineira CW DX contest. QSL to home call.

GUATEMALA, TG. Dante, TG9ADM will be QRV in the CQ Manchester Mineira CW DX contest. Activity will be on 80 meters. QSL via EA5GL.

AUSTRALIA, VK. Special event station VI6ONE is QRV until April 18 to bring attention to the 2023 Scouts Western Australia's Jamboree style One Camp. QSL via operators' instructions.

BRITISH VIRGIN ISLAND, VP2V. Seth, KD9TAW will be QRV as VP2V/KD9TAW from Tortola, IOTA NA-023, from April 17 to 22. Activity will be on 40 to 10 meters using SSB and FT8. QSL via LoTW.

LAKSHADWEEP ISLANDS, VU7. Operators YL2GM and VU2CDP will be QRV as VU7W from Kavaratti Island, IOTA AS-011, from April 15 to 29. Activity will be on 160 to 6 meters using CW, SSB, and FT8. QSL via YL2GN.

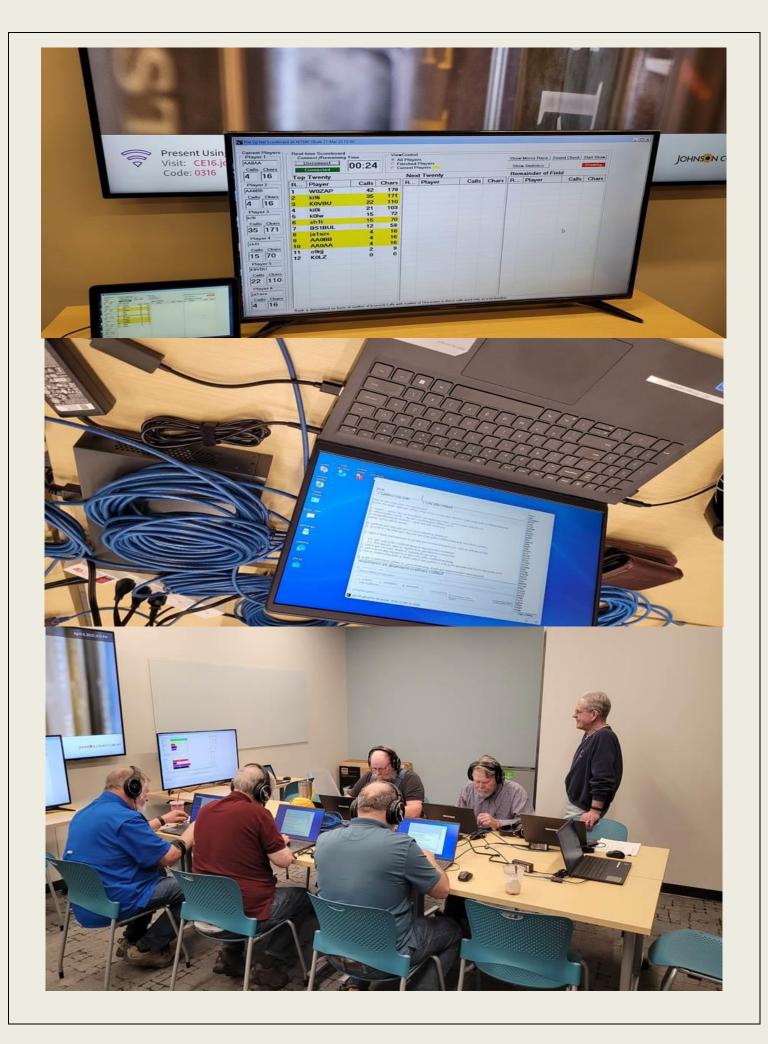
ALBANIA, ZA. Burkhard, DL3KZA is QRV as ZA/DL3KZA until April 17. Activity is on 40 to 10 meters using FT8. QSL to home call.

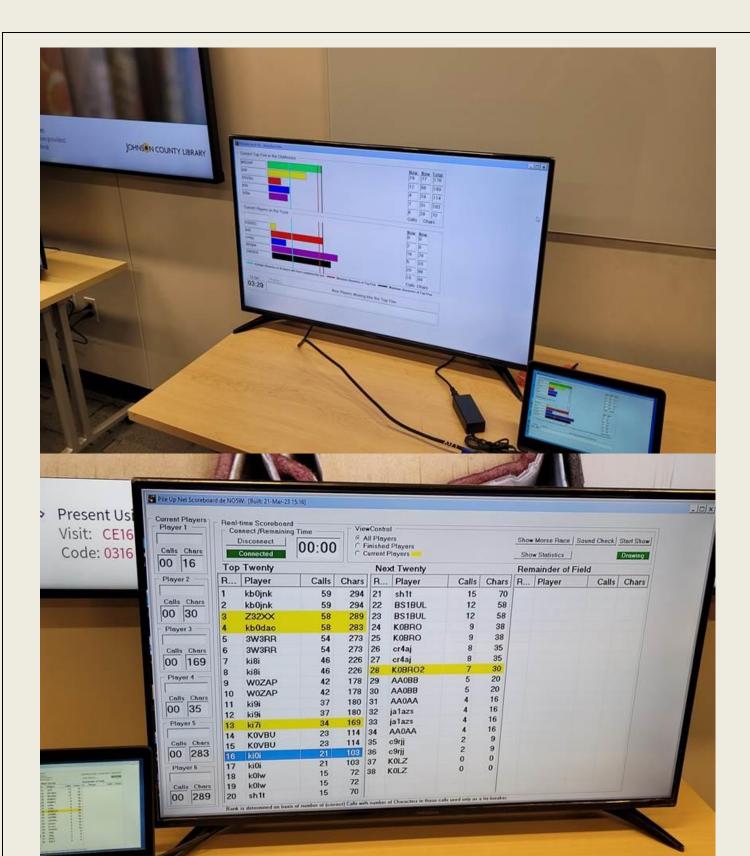
THANKS, ARRL DX BULLETIN!

NEW KCDXC PILE UP CONTEST TESTED BEFORE DAYTON Pics by K0XM

Tonight's burn in went VERY well. Numerous runs were conducted and just one hiccup was noted, but there were NO crashes. Everyone thinks we are ready to go for Dayton/Xenia. MAJOR thanks to Rick WOZAP for his work on getting this going. Also MAJOR thanks to Chuck NO5W the author of the software.

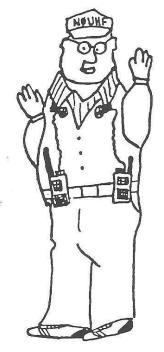
The "victims" tonight were Ron, KOBRO, Mark KIOI, Dragan KOAP/Z32XX, Bill KOVBU, and Lee KOLW. MANY thanks everyone for your help.





OLDIE BUT GOODIE:

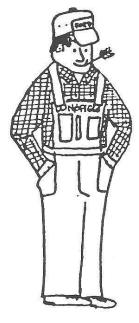
THREE HAMS THAT WILL DO POORLY ON THE KCDX TRIVIA TEST by ABØX



Thinks DX is working Omaha, Nebraska on 2-Meters.



Ragchews on 40 meters and still wears plaid leisure suits.



The daily Net Control for the Iowa Porker's Net on 3.803 mz.



KCDX CLUB
KEEPING THE DAYTON TRADITION ALIVE!















